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PTO/SB/05 (11-00)  
Approved for use through 10/31/2002. OMB 0651-0032

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# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. 520.40466X00

First Inventor Makoto KITANO

Title See 1 in Addendum

Express Mail Label No.

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 25]  
(preferred arrangement set forth below)
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 8]
5. Oath or Declaration [Total Pages]
  - a. ☐ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63 (d))  
(for continuation/divisional with Box 18 completed)
  - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s)  
named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

## ADDRESS TO:

Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
  - a. ☐ Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i. ☐ CD-ROM or CD-R (2 copies); or
    - ii. ☐ paper
  - c. ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement (when there is an assignee) ☐ Power of Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☒ Other: See Attachment

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP)

of prior application No. /

Prior application information

Examiner

Group Art Unit.

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

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or ☐ Correspondence address below

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Address

City

State

Zip Code

Country

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Name (Print/Type)

Mervin Kraus

Registration No. (Attorney/Agent)

22.466

Signature

*Mervin Kraus*

Date

August 6, 2001

Burden Hour Statement This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231

**Attorney Docket No.:** 520.40466X00  
**First Inventor:** Makoto KITANO  
**Title:** LIQUID COOLING SYSTEM AND PERSONAL COMPUTER USING THEREOF  
**Express Mail Label No.:**

**UTILITY PATENT APPLICATION TRANSMITTAL (PTO/SB/05)**

**17. Other Accompanying Application Parts (Cont'd):**

Figs. 1-15

Credit Card Payment Form

List and Copies of Prior Art

Claim For Priority Letter

17. Other Accompanying Application Parts (Cont'd):

[illegible]

- [illegible]

|  |                |   |  |                    |  |             |                |                      |               |               |  |                  |  |                     |              |
|--|----------------|---|--|--------------------|--|-------------|----------------|----------------------|---------------|---------------|--|------------------|--|---------------------|--------------|
| <h1 style="margin: 0;">FEE TRANSMITTAL</h1> <h2 style="margin: 0;">for FY 2000</h2> <p style="font-size: small; margin: 0;">Patent fees are subject to annual revision.<br/>Small Entity payments <i>must</i> be supported by a small entity statement, otherwise large entity fees must be paid. See Forms PTO/SB/09-12.<br/>See 37 C.F.R. §§ 1.27 and 1.28</p> |                | <p><b>Complete if Known</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td style="width: 50%;"></td> </tr> <tr> <td>Filing Date</td> <td>August 6, 2001</td> </tr> <tr> <td>First Named Inventor</td> <td>Makoto KITANO</td> </tr> <tr> <td>Examiner Name</td> <td></td> </tr> <tr> <td>Group / Art Unit</td> <td></td> </tr> <tr> <td>Attorney Docket No.</td> <td>520.40466X00</td> </tr> </table> |  | Application Number |  | Filing Date | August 6, 2001 | First Named Inventor | Makoto KITANO | Examiner Name |  | Group / Art Unit |  | Attorney Docket No. | 520.40466X00 |
| Application Number   |                |   |  |                    |  |             |                |                      |               |               |  |                  |  |                     |              |
| Filing Date  | August 6, 2001 |   |  |                    |  |             |                |                      |               |               |  |                  |  |                     |              |
| First Named Inventor   | Makoto KITANO  |   |  |                    |  |             |                |                      |               |               |  |                  |  |                     |              |
| Examiner Name  |                |   |  |                    |  |             |                |                      |               |               |  |                  |  |                     |              |
| Group / Art Unit   |                |   |  |                    |  |             |                |                      |               |               |  |                  |  |                     |              |
| Attorney Docket No.  | 520.40466X00   |   |  |                    |  |             |                |                      |               |               |  |                  |  |                     |              |
| TOTAL AMOUNT OF PAYMENT  |                | (\$) <b>790.00</b>  |  |                    |  |             |                |                      |               |               |  |                  |  |                     |              |

| METHOD OF PAYMENT (check one)  | FEE CALCULATION (continued)  |  |                       |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
|--|--|--|-----------------------|-----------------|----------|---------|---------|-------------------------------------|--------|---------|---------|---|------|---------|---------|---------------------------|------|-----------|-----------|--|------|----------|----------|--|------|--------------|------------|---|--------------------|-----------------------|-----------------------|--|----------|---------|---------|---|------|---------|---------|--|------|-----------|---------|---|------|-----------|---------|--|------|---------|---------|--|------|--------------|---------|--|-------------------|--|---------|--------------------------|------|-----------|-----------|---|------|---------|--------|----------------------------------|------|-----------|---------|------------------------------------|------|-----------|---------|--------------------------------|------|---------|---------|------------------|------|---------|---------|-----------------|------|---------|---------|-------------------------------|------|--------|--------|---|------|---------|---------|---|------|--------|--------|--|------|---------|---------|---|------|---------|---------|--|------|---------------------------|--|--|------|---------------------------|--|--|------|--|--|-----------------------|-----------------------|-----------------|----------|---------|---------|--------------------|--------|---------|---------|-------------------|--|---------|---------|------------------|--|---------|---------|--------------------|--|---------|--------|------------------------|--|--------------|--|--|--------------------|-----------------------|-----------------------|-----------------|----------|--------|-------|------------------------|--|--------|--------|-----------------------------------|--|---------|---------|---------------------------------------|--|--------|--------|--|--|--------|-------|--|--|--------------|--|--|-------------------|--|
| <p>1. <input type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to.</p> <p>Deposit Account Number: <b>01-2135</b></p> <p>Deposit Account Name: <b>Antonelli, Terry, Stout &amp; Kraus, LLP</b></p> <p><input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR §§ 1.16 and 1.17</p> <p>2. <input checked="" type="checkbox"/> Payment Enclosed:<br/> <input type="checkbox"/> Check    <input type="checkbox"/> Money Order    <input checked="" type="checkbox"/> Other</p>  | <p>3. ADDITIONAL FEES</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Small Entity Fee Code</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105 130</td><td>205 65</td><td>Surcharge - late filing fee or oath</td><td>0.00</td></tr> <tr><td>127 50</td><td>227 25</td><td>Surcharge - late provisional filing fee or cover sheet.</td><td>0.00</td></tr> <tr><td>139 130</td><td>139 130</td><td>Non-English specification</td><td>0.00</td></tr> <tr><td>147 2,520</td><td>147 2,520</td><td>For filing a request for reexamination</td><td>0.00</td></tr> <tr><td>112 920*</td><td>112 920*</td><td>Requesting publication of SIR prior to Examiner action</td><td>0.00</td></tr> <tr><td>113 1,840*</td><td>113 1,840*</td><td>Requesting publication of SIR after Examiner action</td><td>0.00</td></tr> <tr><td>115 110</td><td>215 55</td><td>Extension for reply within first month</td><td>0.00</td></tr> <tr><td>116 380</td><td>216 190</td><td>Extension for reply within second month</td><td>0.00</td></tr> <tr><td>117 870</td><td>217 435</td><td>Extension for reply within third month</td><td>0.00</td></tr> <tr><td>118 1,360</td><td>218 680</td><td>Extension for reply within fourth month</td><td>0.00</td></tr> <tr><td>128 1,850</td><td>228 925</td><td>Extension for reply within fifth month</td><td>0.00</td></tr> <tr><td>119 300</td><td>219 150</td><td>Notice of Appeal</td><td>0.00</td></tr> <tr><td>120 300</td><td>220 150</td><td>Filing a brief in support of an appeal</td><td>0.00</td></tr> <tr><td>121 260</td><td>221 130</td><td>Request for oral hearing</td><td>0.00</td></tr> <tr><td>138 1,510</td><td>138 1,510</td><td>Petition to institute a public use proceeding</td><td>0.00</td></tr> <tr><td>140 110</td><td>240 55</td><td>Petition to revive - unavoidable</td><td>0.00</td></tr> <tr><td>141 1,210</td><td>241 605</td><td>Petition to revive - unintentional</td><td>0.00</td></tr> <tr><td>142 1,210</td><td>242 605</td><td>Utility issue fee (or reissue)</td><td>0.00</td></tr> <tr><td>143 430</td><td>243 215</td><td>Design issue fee</td><td>0.00</td></tr> <tr><td>144 580</td><td>244 290</td><td>Plant issue fee</td><td>0.00</td></tr> <tr><td>122 130</td><td>122 130</td><td>Petitions to the Commissioner</td><td>0.00</td></tr> <tr><td>123 50</td><td>123 50</td><td>Petitions related to provisional applications</td><td>0.00</td></tr> <tr><td>126 240</td><td>126 240</td><td>Submission of Information Disclosure Stmt</td><td>0.00</td></tr> <tr><td>581 40</td><td>581 40</td><td>Recording each patent assignment per property (times number of properties)</td><td>0.00</td></tr> <tr><td>146 690</td><td>246 345</td><td>Filing a submission after final rejection (37 CFR § 1.129(a))</td><td>0.00</td></tr> <tr><td>149 690</td><td>249 345</td><td>For each additional invention to be examined (37 CFR § 1.129(b))</td><td>0.00</td></tr> <tr><td colspan="3">Other fee (specify) _____</td><td>0.00</td></tr> <tr><td colspan="3">Other fee (specify) _____</td><td>0.00</td></tr> <tr> <td colspan="2"> <p>1. 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| 105 130  | 205 65   | Surcharge - late filing fee or oath  | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 127 50   | 227 25   | Surcharge - late provisional filing fee or cover sheet.                    | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 139 130  | 139 130  | Non-English specification  | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 147 2,520  | 147 2,520  | For filing a request for reexamination                                     | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 112 920*   | 112 920*   | Requesting publication of SIR prior to Examiner action                     | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 113 1,840*   | 113 1,840*   | Requesting publication of SIR after Examiner action                        | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 115 110  | 215 55   | Extension for reply within first month                                     | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 116 380  | 216 190  | Extension for reply within second month                                    | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 117 870  | 217 435  | Extension for reply within third month                                     | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 118 1,360  | 218 680  | Extension for reply within fourth month                                    | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 128 1,850  | 228 925  | Extension for reply within fifth month                                     | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 119 300  | 219 150  | Notice of Appeal   | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 120 300  | 220 150  | Filing a brief in support of an appeal                                     | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 121 260  | 221 130  | Request for oral hearing   | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 138 1,510  | 138 1,510  | Petition to institute a public use proceeding                              | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 140 110  | 240 55   | Petition to revive - unavoidable   | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 141 1,210  | 241 605  | Petition to revive - unintentional   | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 142 1,210  | 242 605  | Utility issue fee (or reissue)   | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 143 430  | 243 215  | Design issue fee   | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 144 580  | 244 290  | Plant issue fee  | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 122 130  | 122 130  | Petitions to the Commissioner  | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 123 50   | 123 50   | Petitions related to provisional applications                              | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 126 240  | 126 240  | Submission of Information Disclosure Stmt                                  | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 581 40   | 581 40   | Recording each patent assignment per property (times number of properties) | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 146 690  | 246 345  | Filing a submission after final rejection (37 CFR § 1.129(a))              | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 149 690  | 249 345  | For each additional invention to be examined (37 CFR § 1.129(b))           | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| Other fee (specify) _____  |  |  | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| Other fee (specify) _____  |  |  | 0.00                  |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| <p>1. BASIC FILING FEE</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Small Entity Fee Code</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>101 690</td><td>201 345</td><td>Utility filing fee</td><td>710.00</td></tr> <tr><td>106 310</td><td>206 155</td><td>Design filing fee</td><td></td></tr> <tr><td>107 480</td><td>207 240</td><td>Plant filing fee</td><td></td></tr> <tr><td>108 690</td><td>208 345</td><td>Reissue filing fee</td><td></td></tr> <tr><td>114 150</td><td>214 75</td><td>Provisional filing fee</td><td></td></tr> <tr> <td colspan="3">SUBTOTAL (1)</td> <td>(\$)<b>710.00</b></td> </tr> </tbody> </table> <p>2. EXTRA CLAIM FEES</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Small Entity Fee Code</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>103 18</td><td>203 9</td><td>Claims in excess of 20</td><td></td></tr> <tr><td>102 78</td><td>202 39</td><td>Independent claims in excess of 3</td><td></td></tr> <tr><td>104 260</td><td>204 130</td><td>Multiple dependent claim, if not paid</td><td></td></tr> <tr><td>109 78</td><td>209 39</td><td>** Reissue independent claims over original patent</td><td></td></tr> <tr><td>110 18</td><td>210 9</td><td>** Reissue claims in excess of 20 and over original patent</td><td></td></tr> <tr> <td colspan="3">SUBTOTAL (2)</td> <td>(\$)<b>80.00</b></td> </tr> </tbody> </table> |  | Large Entity Fee Code  | Small Entity Fee Code | Fee Description | Fee Paid | 101 690 | 201 345 | Utility filing fee                  | 710.00 | 106 310 | 206 155 | Design filing fee                                       |      | 107 480 | 207 240 | Plant filing fee          |      | 108 690   | 208 345   | Reissue filing fee                     |      | 114 150  | 214 75   | Provisional filing fee                                 |      | SUBTOTAL (1) |            |   | (\$) <b>710.00</b> | Large Entity Fee Code | Small Entity Fee Code | Fee Description                        | Fee Paid | 103 18  | 203 9   | Claims in excess of 20                  |      | 102 78  | 202 39  | Independent claims in excess of 3      |      | 104 260   | 204 130 | Multiple dependent claim, if not paid   |      | 109 78    | 209 39  | ** Reissue independent claims over original patent |      | 110 18  | 210 9   | ** Reissue claims in excess of 20 and over original patent |      | SUBTOTAL (2) |         |  | (\$) <b>80.00</b> | <p>3. SUBTOTAL (3) (\$)<b>0.00</b></p> <p>* Reduced by Basic Filing Fee Paid</p> |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| Large Entity Fee Code  | Small Entity Fee Code  | Fee Description  | Fee Paid              |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 101 690  | 201 345  | Utility filing fee   | 710.00                |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 106 310  | 206 155  | Design filing fee  |                       |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 107 480  | 207 240  | Plant filing fee   |                       |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 108 690  | 208 345  | Reissue filing fee   |                       |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 114 150  | 214 75   | Provisional filing fee   |                       |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| SUBTOTAL (1)   |  |  | (\$) <b>710.00</b>    |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| Large Entity Fee Code  | Small Entity Fee Code  | Fee Description  | Fee Paid              |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 103 18   | 203 9  | Claims in excess of 20   |                       |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 102 78   | 202 39   | Independent claims in excess of 3  |                       |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 104 260  | 204 130  | Multiple dependent claim, if not paid                                      |                       |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 109 78   | 209 39   | ** Reissue independent claims over original patent                         |                       |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| 110 18   | 210 9  | ** Reissue claims in excess of 20 and over original patent                 |                       |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |
| SUBTOTAL (2)   |  |  | (\$) <b>80.00</b>     |                 |          |         |         |                                     |        |         |         |   |      |         |         |                           |      |           |           |  |      |          |          |  |      |              |            |   |                    |                       |                       |  |          |         |         |   |      |         |         |  |      |           |         |   |      |           |         |  |      |         |         |  |      |              |         |  |                   |  |         |                          |      |           |           |   |      |         |        |                                  |      |           |         |                                    |      |           |         |                                |      |         |         |                  |      |         |         |                 |      |         |         |                               |      |        |        |   |      |         |         |   |      |        |        |  |      |         |         |   |      |         |         |  |      |                           |  |  |      |                           |  |  |      |  |  |                       |                       |                 |          |         |         |                    |        |         |         |                   |  |         |         |                  |  |         |         |                    |  |         |        |                        |  |              |  |  |                    |                       |                       |                 |          |        |       |                        |  |        |        |                                   |  |         |         |                                       |  |        |        |  |  |        |       |  |  |              |  |  |                   |  |

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| SUBMITTED BY      |                                   | Complete (if applicable) |                |
| Name (Print/Type) | Registration No. (Attorney/Agent) | Telephone                | Date           |
| Melvin Kraus      | 22,466                            | 703-312-6600             | August 6, 2001 |
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